AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please amend the paragraph at page 6, lines 9-19 (corresponding to page 8, line 21 of the international application publication) as follows:

As used herein the terms "detecting" and "determining the ~~pressure~~ presence or amount of" encompass both quantitative and qualitative assessment of the level of antibody production, in the sense of obtaining an absolute value for the amount of antibody produced in the sample, and also an index, ratio, percentage or similar indication of the level of antibody production, as well as semi-quantitative or qualitative assessments.

Please amend the paragraph at page 11, lines 11-16 as follows:

Figure 1 shows the results of a clinical influenza vaccine trial in which samples from 9 subjects (persons 2 to 10) were tested using the lymphocyte disruption method. The left-hand scale on each bar graph shows ~~H3N2 IgG~~ H3N2 IgG plotted in ng against days post vaccination on the horizontal scale. Superimposed on each bar graph is a dotted line showing the HI titre on the right hand scale for A/Nanchong virus. See Examples 1 and 2 for further details.

Please amend the paragraph spanning 12, line 26 to page 13 line 17 as follows:

The sample to be analyzed, having been treated as mentioned above if required to obtain the separated lymphocytes, are then disrupted to release newly synthesized antibodies. This may be performed by any convenient technique known in the prior art which effectively disrupts external and internal membrane structures without affecting the ability of the released antibodies to bind to their complementary epitopes, e.g. by the use of detergents, chaotropic agents, disruption buffers e.g. containing EDTA or

alternative disruption methods such as sonication or physical disruption through generation of shear stresses. Preferably, however a disruption buffer is used as this is generally the simplest and most convenient technique e.g. as described in the Examples herein i.e. buffer containing detergent such as 0.5% ~~deoxychelate~~ deoxychelate. Appropriate disruption buffers may be used to stabilize the released antibodies, e.g. to control pH or degradation. Thus for example buffers containing protease inhibitors may be employed if necessary. Alternative methods of disruption include for example the use of freeze/thaw cycles or even the use of liquid nitrogen. This results in a lysate in which the released antibodies are in solution which is used for subsequent steps. It will be appreciated that in order to obtain sufficient amounts of newly synthesized antibodies in the sample to be detected, it is desirable that as many of the lymphocyte cells as possible are disrupted to release the antibodies. Preferably, then, the disruption means is suited to this end and at least 40% or 50%, more preferably at least 60%, 70% or 80% and more preferably at least 90% of 95% of the lymphocytes in the sample are disrupted. After disruption of the lymphocytes the antibody content of the sample is assessed by an appropriate technique allowing detection of the target antibodies. Conveniently to achieve this, the sample may be contacted with a solid phase carrying an appropriate binding partner to immobilize the antibody or antibodies to be detected. Conveniently the binding partner is the antigen (immunogen) or antigens (i.e. one or more), recognized by the antibody or antibodies or parts thereof to be detected. In one embodiment, the present invention thus provides a method of determining the presence or amount of newly synthesized antibody in a sample, said method comprising: contacting, aliquots of said sample, or optionally, of lymphocytes directly isolated from said sample wherein said lymphocytes have been disrupted to release antibodies or parts thereof associated with said lymphocytes, with one or more antigens, preferably carried on a solid phase, recognized by the antibody or antibodies to be detected; detecting binding of antibody to said antigen(s); and comparing said antibody binding to control and/or reference samples, whereby to obtain a determination of the presence or amount of newly synthesized antibody in response to said antigen(s). In the above method, control or reference samples

may be appropriate negative or positive controls, e.g. blanks, normal samples or spiked samples.